

**Notice of Allowability**

Application No.

10/611,411

Applicant(s)

MANZO ET AL.

Examiner

Art Unit

Peter J. Vrettakos

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Remarks 8-21-07.
2. ☒ The allowed claim(s) is/are 1-3,9,10,12-15,17-19 and 53-70.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>6-7-07</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Vic Okumoto on 10-16-07.

This amendment, *infra*, reflects the discussion between the Examiner and the Applicant in the Examiner Telephone Interview conducted October 16, 2007.

The application has been amended as follows:

#### Amendment to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

#### Listing of the Claims:

1. An end-effector device for use with an electrosurgical instrument for performing a minimally invasive surgical procedure, the end-effector device comprising:  
an electrode;  
a mechanism including at least one spring tab adapted to snap fit into a housing of an electrosurgical instrument for coupling the electrode to the [[an]] electrosurgical instrument;

an insulative rigid sleeve disposed at least partially around the electrode so as to inhibit surface conduction of electrical current flowing from the electrode to the electrosurgical instrument;

first and second internal sealing rings respectively compressed against inner distal and proximal ends of the insulative rigid sleeve and disposed so as to inhibit fluid from entering into an interior of the insulative rigid sleeve through respectively the inner distal and proximal ends and making contact with any portion of the electrode disposed therein during a minimally invasive surgical procedure; and

an insulation layer disposed at least partially around the electrode and one of the first and second internal sealing rings so as to additionally inhibit fluid from entering into the interior of the insulative rigid sleeve and making contact with any portion of the electrode disposed therein during the minimally invasive surgical procedure.

2. The end-effector device as in claim 1, wherein the electrode comprises a scalpel blade, a beaver blade, a hook, a spatula, movable jaws, scissors, a needle point, hockey stick, dissectors, or a probe.

3. The end-effector device as in claim 1, wherein the electrode transmits radiofrequency energy during the minimally invasive surgical procedure.

Claims 4-8 are canceled.

9. An end-effector device for use with an electrosurgical instrument for performing a minimally invasive surgical procedure, the end-effector device comprising:

an electrode;

a mechanism including an electrical connector for electrical connection with a transmission member via a coil shaped spring member of an electrosurgical instrument for coupling the electrode to the electrosurgical instrument;

an insulative rigid sleeve disposed at least partially around the electrode so as to inhibit surface conduction of electrical current flowing from the electrode to the electrosurgical instrument;

first and second internal sealing rings respectively compressed against inner distal and proximal ends of the insulative rigid sleeve and disposed so as to inhibit fluid from entering into an interior of the insulative rigid sleeve through respectively the inner distal and proximal ends and making contact with any portion of the electrode disposed therein during a minimally invasive surgical procedure; and

an insulation layer disposed at least partially around the electrode and one of the first and second internal sealing rings so as to additionally inhibit fluid from entering into the interior of the insulative rigid sleeve and making contact with any portion of the electrode disposed therein during the minimally invasive surgical procedure.

10. An end-effector device for use with an electrosurgical instrument for performing a minimally invasive surgical procedure, the end-effector device comprising:

an electrode;

a mechanism including an electrical connector for electrical connection with a transmission member via a gripping member of an electrosurgical instrument for coupling the electrode to the electrosurgical instrument, the gripping member having two arms to grip the electrical connector;

an insulative rigid sleeve disposed at least partially around the electrode so as to inhibit surface conduction of electrical current flowing from the electrode to the electrosurgical instrument;

first and second internal sealing rings respectively compressed against inner distal and proximal ends of the insulative rigid sleeve and disposed so as to inhibit fluid from entering into an interior of the insulative rigid sleeve through respectively the inner distal and proximal ends and making contact with any portion of the electrode disposed therein during a minimally invasive surgical procedure; and

an insulation layer disposed at least partially around the electrode and one of the first and second internal sealing rings so as to additionally inhibit fluid from entering into the interior of the insulative rigid sleeve and making contact with any portion of the electrode disposed therein during the minimally invasive surgical procedure.

Claim 11 is cancelled.

12. The end-effector device as in claim 1[[8]], wherein at least one of the first and second internal sealing rings comprises an o-ring.

13. The end-effector device as in claim 1[[4]], wherein the end-effector device is constructed so as to be disposable.

14. The end-effector device as in claim 1[[4]], wherein the coupling mechanism is configured so as to be incapable of re-coupling to the electrosurgical instrument after once being coupled to and uncoupled from the electrosurgical instrument.

15. The end-effector device as in claim 1, wherein the coupling mechanism effectively permanently couples the device with the electrosurgical instrument.

Claim 16 is canceled.

17. The end-effector device as in claim 1, wherein the insulation layer comprises ceramic material, glass, silicone, polypropylene, fluoropolymer, or insulating plastic.

18. The end-effector device as in claim 17, wherein the insulative rigid sleeve comprises ceramic material, glass, silicone, polypropylene, fluoropolymer, or insulating plastic.

19. The end-effector device as in claim 17, wherein the insulation layer comprises a first insulation material completely encircling part of the electrode, and

wherein the insulative rigid sleeve comprises a second insulation material completely encircling the first insulation material and abutting the electrosurgical instrument.

Claims 20-52 are canceled.

53. The end-effector device as in claim 9, wherein the electrode comprises a scalpel blade, a beaver blade, a hook, a spatula, movable jaws, scissors, a needle point, hockey stick, dissectors, or a probe.

54. The end-effector device as in claim 9, wherein the electrode transmits radiofrequency energy during the minimally invasive surgical procedure.

55. The end-effector device as in claim 9, wherein at least one of the first and second internal sealing rings comprises an o-ring.

56. The end-effector device as in claim 9, wherein the end-effector device is constructed so as to be disposable.

57. The end-effector device as in claim 9, wherein the coupling mechanism is configured so as to be incapable of re-coupling to the electrosurgical instrument after once being coupled to and uncoupled from the electrosurgical instrument.

58. The end-effector device as in claim 9, wherein the coupling mechanism effectively permanently couples the device with the electrosurgical instrument.

59. The end-effector device as in claim 9, wherein the insulation layer comprises ceramic material, glass, silicone, polypropylene, fluoropolymer, or insulating plastic.

60. The end-effector device as in claim 59, wherein the insulative rigid sleeve comprises ceramic material, glass, silicone, polypropylene, fluoropolymer, or insulating plastic.

61. The end-effector device as in claim 59, wherein the insulation layer comprises a first insulation material completely encircling part of the electrode, and wherein the insulative rigid sleeve comprises a second insulation material completely encircling the first insulation material and abutting the electrosurgical instrument.

62. The end-effector device as in claim 10, wherein the electrode comprises a scalpel blade, a beaver blade, a hook, a spatula, movable jaws, scissors, a needle point, hockey stick, dissectors, or a probe.

63. The end-effector device as in claim 10, wherein the electrode transmits radiofrequency energy during the minimally invasive surgical procedure.



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64. The end-effector device as in claim 10, wherein at least one of the first and second internal sealing rings comprises an o-ring.

65. The end-effector device as in claim 10, wherein the end-effector device is constructed so as to be disposable.

66. The end-effector device as in claim 10, wherein the coupling mechanism is configured so as to be incapable of re-coupling to the electrosurgical instrument after once being coupled to and uncoupled from the electrosurgical instrument.

67. The end-effector device as in claim 10, wherein the coupling mechanism effectively permanently couples the device with the electrosurgical instrument.

68. The end-effector device as in claim 10, wherein the insulation layer comprises ceramic material, glass, silicone, polypropylene, fluoropolymer, or insulating plastic.

69. The end-effector device as in claim 68, wherein the insulative rigid sleeve comprises ceramic material, glass, silicone, polypropylene, fluoropolymer, or insulating plastic.

70. The end-effector device as in claim 68, wherein the insulation layer comprises a first insulation material completely encircling part of the electrode, and wherein the insulative rigid sleeve comprises a second insulation material completely encircling the first insulation material and abutting the electrosurgical instrument.

The following is an examiner's statement of reasons for allowance: Claims 1,9 and 10 are independent. Language that makes each of the claims allowable is **bolded** below. Corresponding structural elements and their location in respective figures are underlined.

Claim 1 has been amended to further limit the coupling mechanism to include **at least one spring tab** adapted to snap fit into a housing of an electrosurgical instrument for coupling the electrode to the electrosurgical instrument (which is a further limited version of Claim 7). See element 186 in figure 7.

Claim 9 has been amended to be placed in independent form including the limitations of Claim 1 with the exception that the coupling mechanism of Claim 9 is a mechanism including an electrical connector for electrical connection with a transmission member via a **coil shaped spring member** of an electrosurgical instrument for coupling the electrode to the electrosurgical instrument. See element 202 in figure 9.

Claims 10 has been amended to be placed in independent form including the limitations of Claim 1 with the exception that the coupling mechanism of Claim 10 is a

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mechanism including an electrical connector for electrical connection with a transmission member via a **gripping member** of an electrosurgical instrument for coupling the electrode to the electrosurgical instrument, the **gripping member having two arms to grip the electrical connector**. See element 204 in figure 10a.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Vrettakos whose telephone number is 571-272-4775. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pete Vrettakos  
October 18, 2007

/Roy D. Gibson/  
Primary Examiner  
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